Chapter 4. Standards and Guidelines

Introduction

Standards and Guidelines provide sideboards and guidance for project and activity decision making to help achieve Desired Conditions and Objectives. Standards must be followed and can only change with a Forest Plan Amendment. Guidelines must be followed, but may be modified somewhat for a specific project if the intent of the guideline is followed and the deviation is addressed in the decision document with supporting rationale.

Neither standards nor guidelines restate existing law or policy—you may notice few related to Heritage Resources, because the majority of guidance already exists in law or policy direction. They also do not include statements that recommend an analysis, inventory, or monitoring. Management direction not included in the Forest Plan is found in numerous laws, regulations, executive orders, Forest Service policies, and additional guidance documents. These relevant laws regulations, policy, plans, and agreements are listed in appendix C.

The standards and guidelines in this chapter apply to all parts of the Prescott National Forest. In chapter 5, management area standards and guidelines are listed that apply to only a subset of the Prescott NF—that is, an individual management area.

Similar to desired conditions (chapter 2), standards and guidelines have been divided into three sections, Physical, Biological, and Social/Economic Factors. Standards and guidelines related to watershed and soils are found in the Physical Factors section. Vegetation standards and guidelines including those for plants, fire as a disturbance process, and wildlife standards and guidelines are found in the Biological Factors' section. Finally, standards and guidelines related to the following areas are found in the Social/Economic Factors' section: management of recreation, management of landownership, energy and communication sites, permits, recreation residences, scenic values, minerals management, management of heritage values, range management, and management for forest health.

Associated maps are attached in appendix A.

Physical Factors

Watershed

Watershed integrity standards and guidelines provide guidance for trending toward or achieving the following Desired Conditions labeled as DC-Ecosystem Resilience-1, DC-Watershed-1 through 5, and DC-Veg-1, DC-Aquatic-1, and DC-Transportation and Facilities-1 in chapter 2 of this document.

Watershed Integrity (See also Range Std.-2 and Guidelines-1, 5; Minerals Guidelines-2.3.4.12; Wildland Fire Guidelines-10,12; and Transportation Guidelines-1,2,3,4,5,11.)	
Std-WS-1	**Construction or maintenance equipment service areas shall be located to prevent gas, oil, or other contaminates from washing or leaching into streams.**
Std-WS-2	**Equipment working on open water and wetlands shall be cleaned prior to entry into such areas to remove gas, oil, and other contaminants.**
Std-WS-3	**Containment measures shall be employed for storage of fuels and other toxicants.**

Guide-WS-1	As the cumulative effects of land disturbing projects on stream channel and water quality are determined for 6th or 7th level HUC watersheds, the following should be considered: • Level of disturbance • Type of activity • Soil, geologic, streamflow characteristics, and expected recovery periods
Guide-WS-2	Watershed projects should be designed and implemented in a manner that promotes long-term productivity and ecosystem integrity.
Guide-WS-3	Watershed projects that provide surface water for municipal use should be given high priority.
Guide-WS-4	Riparian dependent resources should be managed to maintain and improve productivity and diversity of riparian dependent species. Riparian communities should provide for or enhance habitat for aquatic species and riparian plants.
Guide-WS-5	Adverse impacts to stream channel features (e.g., stream banks, obligate riparian vegetation) should be minimized by modifying management actions. Examples of modification could include, but are not limited to, adjusting timing and season of grazing, limiting use and location of heavy machinery, or avoiding placing trails or other recreational structures where recreation use could negatively affect stream channel features.
Guide-WS-6	Ground cover sufficient to filter run-off and prevent detrimental erosion should be retained in riparian corridors,[1] seeps, and springs.
Guide-WS-7	New infrastructure or facilities (e.g., roads, trails, parking lots, trailheads, energy transmission lines) should be located outside of riparian corridors. If crossing such areas with transmission lines is unavoidable, design features should be used to maintain hydrologic function and minimize impacts on riparian habitats.
Guide-WS-9	In general, infrastructure or facilities locations that lead to erosion or negative impacts to riparian systems should be mitigated/corrected. If no permanent correction is possible, they should be relocated outside of riparian corridors as opportunities arise.
Guide-WS-10	Operation of heavy equipment, such as dozers, backhoes, or vehicles, in stream channels, seeps, and springs should be avoided. If use of equipment in such areas is required, site specific design features should be implemented to minimize impact to watershed integrity. Restoration or stabilization should occur immediately following disturbance.
Guide-WS-11	Along perennial streams, perennial intermittent streams, and spring ponds, mitigations such as off-site water for livestock, should be provided to minimize impact on riparian communities and sensitive sites.
Guide-WS-12	Measures that restrict use should be considered to mitigate recurring negative to aquatic species and riparian plant systems. These could include but are not limited to installation of barriers, road closures, area closures, or seasonal restrictions.

[1] For this document, a riparian corridor consists of the stream and an adjacent area of varying width where management practices that might affect water quality, fish, or other aquatic resources are modified. It is an area that acts as an effective filter and absorptive zone for sediment; protects aquatic and terrestrial riparian habitats; protects a channel and stream banks; and promotes floodplain stability.

Soils

Soil guidelines provide guidance for trending toward or achieving Desired Conditions labeled as DC-Watershed-1, DC-Watershed-3, DC-Veg-6 through 8, DC-Veg-13, 14, 17, 18, 19, 21, and DC-Transportation and Facilities-1 in chapter 2 of this document.

Soils	
Guide-Soils-1	Projects should be designed to minimize long and short-term impacts to soil and water resources in all ground-disturbing activities. Where disturbance cannot be avoided, project-specific soil and water conservation practices should be developed.
Guide-Soils-2	Down logs and coarse woody debris should be maintained at the appropriate tonnage per vegetation type as outlined in the vegetative desired condition sections to retain soil productivity.

Biological Factors

Plants

Plant standards and guidelines provide guidance for trending toward or achieving Desired Conditions labeled as DC-Ecosystem Resilience-1, DC-Watershed-3, DC-Veg-4, 5, and 22, DC-Aquatic-1, DC-Transportation and Facilities-1, and DC-Minerals-1 in chapter 2 of this document.

Plants (See also Range Guidelines-4,5; Minerals Guidelines-11,12,13,14,15; Lands Guideline-5,6; and Rec Guideline-5)	
Std-Plants-1	**Collection of Southwestern Region Sensitive Plants shall occur for research or scientific purposes only.**
Std-Plants-2	**When treating non-native and invasive plant species to protect endangered, threatened, proposed, and candidate wildlife and plant species and their habitats, design features in appendix B of the Final Environmental Impact Statement (FEIS) for Integrated Treatment of Noxious or Invasive Weeds (2005) must be followed.**
Guide-Plants-1	Design features and/or mitigation measures should be incorporated in all Forest Service projects as needed to insure that Southwestern Region Sensitive Plant Species do not trend toward listing as threatened or endangered species.
Guide-Plants-2	Applicable design features in appendix B—Design Features, Best Management Practices, Required Protection Measures and Mitigation Measures—from the FEIS for Integrated Treatment of Noxious or Invasive Weeds (2005) should be followed in treating non-native invasive plant species and for managing site disturbing projects and maintenance.
Guide-Plants-3	Efforts to improve severely disturbed sites, especially those within the vicinity of occupied Southwestern Region Sensitive Plant Species habitat, should be undertaken to reduce non-native invasive plant species colonization, protect soils, and improve watershed condition.
Guide-Plants-4	In choosing materials to use for revegetation, consider the following: • Plant or seed materials should be used that are appropriate to the site, capable of becoming established, and are not invasive. • Certified weed free seed and weed free erosion control materials should be used.
Guide-Plants-5	In cases where plant collection permits are issued, collecting seeds or cuttings should be encouraged, while digging or physically removing whole plants should be discouraged.

Fire as a Disturbance Process

Fire standards and guidelines provide guidance for trending toward or achieving Desired Conditions labeled as DC-Ecosystem Resilience-1, DC-Watershed-1, DC-Veg-4, 6 through 9, 11 through 15, 17 through 19, 21, and 22, in chapter 2 of this document.

Wildland Fire (See Also Wilderness Standards. 2 -4 and Guidelines 8 -12)	
Std-Wildland Fire-1	**During response to wildland fire[2], risks to firefighters and the public shall be mitigated[3]. Protection of human life overrides all other priorities.**
Std-Wildland Fire 2	**Fire shall not be used as a tool for management and wildfires shall be suppressed within the Potential Natural Vegetation Type called Desert Communities (see map D, appendix A).**
Guide-Wildland Fire-1	Determinations of responses to wildfire should be based on risk assessments that include pre-season analysis and review as-well-as on-scene and immediate risk assessments by those initially responding to the wildfire incident. Such assessments should be on an appropriate scale and timeline relative to the time of the assessment and the time available during the incident. Such risk assessments should include, but are not limited to the following: • Evaluation of the threats to firefighter and public safety • Evaluation of the threats to both natural and human-made resource values • Evaluation of seasonal and/or climatic conditions • Evaluations of cost-effective strategies that contribute to the success of the appropriate wildfire objective(s)
Guide-Wildland Fire-2	In general, strategies to manage wildland fire (wildfire and prescribed fire) that restore and maintain the natural fire regime, should be encouraged.
Guide-Wildland Fire 3	Within the shaded areas of map B (see appendix A), a management objective of protection should be used to manage wildfires that occur to minimize the risk of loss or damage to human life and property.
Guide-Wildland Fire-4	In non-shaded areas of map B (see appendix A), responses to naturally-ignited fire should consider including other objectives beyond a single objective of suppression or protection.
Guide-Wildland Fire-5	Mechanical or manual treatment of hazardous fuels should be considered where the use of wildland fire (wildfire and prescribed fire) may cause unacceptable damage to other resources or pose an unacceptable risk to life and private property.

[2] Wildland fire is any non-structural fire that occurs in vegetation or natural fuels. It includes both prescribed fires. Wildfires are fires with unplanned ignitions including lightning or unauthorized and accidental human-caused actions. Prescribed fires are intentionally ignited by the Forest Service under an approved plan to meet specific objectives.

[3] Mitigation such as early detection, evacuations, or indirect suppression tactics can be used to minimize risks to firefighters and the public; however, risks are always present to a varying degree depending on weather, terrain, and fuel conditions.

Guide-Wildland Fire-6	For fires managed for resource benefits and prescribed fires, amount of scorch and char should be minimized on trees in areas with a High Scenic Integrity Objective that are visible from Concern Level[4] 1 and 2 roads, unless risk to firefighters and public make this impractical.
Guide-Wildland Fire-7	Slash piles should not be placed in sensitive areas[5] and should be located in places and burned at times that will minimize scorching of adjacent trees.
Guide-Wildland Fire-8	Project-specific design features to avoid undesired impacts should be used if fire is implemented within or near riparian corridors or seeps and springs.
Guide-Wildland-Fire-9	Give Wildland Urban Interface areas high priority for fuel reduction treatments[6].
Guide Wildland Fire 10	Prescribed fires should be excluded from all developed recreation sites including a 100 to 300-foot no fire treatment buffer around sites using existing fire barriers when possible. Normally, shrubs should be retained in these sites for screening purposes, such as between campsites.

Terrestrial Wildlife

Terrestrial wildlife standards and guidelines provide guidance for trending toward or achieving Desired Conditions labeled as DC-Ecosystem Resilience-1, DC-Veg-1, 3, 4, 6 through 22, DC Wildlife 1, DC-Transportation and Facilities-1, DC-Lands-2, and DC-Minerals-1 in chapter 2 of this document.

Terrestrial Wildlife (See also: Wildland Fire Guidelines-2,5,7,10; Minerals Guideline-11; Lands Guideline-2,4,6; Forest Health Guideline-2; Range Std-1 and Guideline-2; Wildland Fire-Guidelines 2,5,7,10,12; and Transportation-Guidelines-2,4,6,8,9,10)	
Std-WL-1	**Requirements included in current recovery plans and conservation strategies for Federally listed Threatened, Endangered, Proposed and Candidate Plant and Wildlife Species shall be incorporated into management activities. Recovery plans and conservation strategies can be found at the following link: http://www.fws.gov/endangered/**
Guide-WL-1	Design features and/or mitigation measures should be incorporated in all Forest Service projects as needed to insure that Southwestern Region Sensitive Species do not trend toward listing as threatened or endangered species.
Guide-WL-2	For Pronghorn antelope the following should occur: • Consider pronghorn fawning needs when scheduling activities in pronghorn fawning

[4] Concern level 1 roads are travel routes where forest visitors have a high interest in scenic qualities. Concern level 2 roads are travelways where forest visitors have a moderate interest in scenic qualities. These routes are displayed on map XX in appendix A.

[5] Examples of sensitive areas are important wildlife habitat, waterways, visually unique areas, heritage, occupied Southwestern Region Sensitive Species habitat, and recreation areas.

[6] Wildland Urban Interface includes those areas of resident populations at imminent risk from wildfire, as well as human developments having special significance. These areas encompass not only the sites themselves, but also the continuous slopes and fuels that lead directly to the sites regardless of the distance involved.

	areas, such as by providing adequate cover and timing of activities to minimize disturbance. • Consider opportunities to enhance pronghorn migration routes when identifying priorities for vegetation treatments within grassland PNVTs. • Use fencing that allows pronghorn passage when replacing fences or building new fences. Most recent AZGFD fencing guidelines related to wire heights, distance between posts, and distances between strands of fence wire should be considered. • As pronghorn habitat improvements are proposed, work done by AZGFD and other partners should be considered to maintain pronghorn travelways across all lands. • Within identified pronghorn habitat, juniper trees that have been cut down should be treated so that pieces lie no higher than 18 inches above the ground.
Guide-WL-3	For cavity nesting birds: • Snags should be retained at levels indicated in Desired Conditions, if available, and replaced at natural recruitment rates.
Guide-WL-4	For raptors as each stick nest and "nest stand[7]" is identified: • Size and structure of raptor species' nest stands should be maintained. • Disturbance at nest sites during the breeding season should be minimized.
Guide-WL-5	For bats the following should occur: • Where known bat use and concentrations of bats occur (such as maternity colonies, hibernacula or seasonal roosts), measures to maintain habitat and reduce disturbance by human activities through use of seasonal or permanent access restrictions should be used. These habitats generally include abandoned mines, caves, bridges, rock crevasses, old buildings, or tree snags. • Bat occupancy should be assessed when considering closing abandoned mines (and caves). • When closing mines occupied by bats, utilize appropriate closure protocols, and consider the installation of bat-friendly closure devices. • Containment and decontamination procedures should be used to avoid spread of white-nose syndrome (Geomyces destructants fungus). Forest Service guidance dated July 21, 2010 or most recent decontamination procedures should be used.
Guide-WL-6	Where Goshawks exist: • A minimum of 3 nest areas and 3 replacement nest areas should be located per territory. Goshawk nest and replacement nest areas should generally be located in drainages, at the base of slopes, and on northerly (NW to NE) aspects. Nest areas

[7] A nest stand includes the nest site and surrounding area that provides nest protection, and desired vegetative structure, to enhance reproductive success of the species using the nest.

	should generally be 25 to 30 acres in size. • Goshawk PFAs (Post-fledging Family Areas) of approximately 420 acres in size should be designated surrounding the nest sites. • Human presence should be minimized in occupied goshawk nest areas during nesting season of March 1 through September 30. • In goshawk foraging areas and PFAs, groups of 3-5 reserve trees should be retained within management-created openings greater than 1 acre, in ponderosa pine and dry mixed conifer, except where the strong potential for wind-throw prevents the possibility of viable reserve trees, or insect and/or disease prevent the eventual development of regeneration into large trees. Management activities and human uses for which the Forest Service issues permits (excluding livestock permits) should be restricted within active nest stands during the active nesting period unless disturbance is not likely to result in nest abandonment.

Aquatic-Related Wildlife

Aquatic wildlife standards and guidelines provide guidance for trending toward or achieving Desired Conditions labeled as DC-Ecosystem Resilience-1, and DC-Aquatic-1in chapter 2 of this document.

Aquatic-Related Wildlife (See also Guideline Minerals 11, 12 and Guidelines Transportation-4,6,8,9)	
Guide-Fish/ Aquatics-1	Design features, mitigation, and project timing considerations should be incorporated into ground disturbing projects that may affect Southwestern Region Sensitive Species' occupied habitat near streams, seeps, and springs. Examples include but are not limited to: undisturbed areas, timing restrictions, adjusted intensity of use, and avoiding use of large equipment.
Guide-Fish/ Aquatics-2	Water developments (such as a diversion or well) should be avoided near streams or seeps and springs where there is high risk of dewatering aquatic habitats.
Guide-Fish/ Aquatics-3	To prevent the spread of invasive species and fungal disease within aquatic habitats, the following should be cleaned of plant, animal, and mud material before coming into the Prescott National Forest: • Mechanized equipment and tools used for projects • Equipment (including suction dredges and hoses) • Watercraft, boating equipment, and personal gear (e.g., personal flotation devices, waders, wading boots/shoes) used for projects, surveys, • Gear used for permitted activities such as events Items should again be cleaned at takeout and suction devices should be drained and cleaned prior to leaving the project site

Social and Economic Factors

Management of Recreation, Transportation, Wilderness, Wild/Scenic Rivers, Education and Interpretation

Recreation management includes providing a variety of recreation opportunities, such as camping, hiking, or driving. It also includes management of wilderness, wild and scenic rivers, and education and interpretation. Standards and guidelines related to recreation management provide guidance for trending toward or achieving DC-Aquatic-1, DC-Rec-1, DC-Wild & Scenic-1, DC-Wilderness-1, DC-Transportation and Facilities-1, and Minerals-1 in chapter 2 of this document.

Recreation (See also Minerals std 3; Lands Guideline 2)	
Std-Rec-1	**Only designated roads, motorized trails, and motorized use areas as depicted and described on the Motorized Vehicle Use Map are open to public motorized vehicle use.**
Std-Rec-2	**Only areas specifically depicted and described on the Motorized Vehicle Use Map are open for motorized big game retrieval. Motorized big game retrieval is precluded in areas where motorized travel is prohibited, such as wilderness.**
Guide-Rec-1	Within areas open for motorized big game retrieval: • Use of motor vehicles should be limited to within one mile of designated system roads to retrieve a legally hunted and tagged elk during elk hunting seasons as designated by the Arizona Game and Fish Department, and for 24 hours following the end of each season. • Only one vehicle (one trip in and one trip out) should be used for motorized big game retrieval per harvested animal. • Hunters should use the most direct and least ground disturbing route in and out of the area to accomplish the retrieval. • Motorized big game retrieval should not occur when conditions are such that travel would cause damage to natural and/or cultural resources. • Motorized vehicles should not cross riparian corridors, streams, and rivers except at hardened crossings or crossings with existing culverts.
Guide-Rec-2	When projects are carried out, they should meet the minimum characteristics for recreation experience and settings as classified in the Recreation Opportunity Spectrum (ROS) inventory and displayed in map C, appendix A. • Areas that are identified as Roaded Natural that are located ½ mile on each side of existing power lines should be managed as Semi-Primitive Motorized. • Motorized use within areas identified as providing a non-motorized recreation experience may take place on a case-by-case basis as documented in site-specific permits. Examples of such permits include, but are not limited to, grazing permits, recreation event permits, or communication site permits.
Guide-Rec-3	Customer services should meet evolving customer needs by being available in a variety of formats, locations, and timeframes.
Guide-Rec-4	Use of native plant species should be emphasized during design of new or improved recreation sites). Invasive weeds should be removed or treated on existing sites before they become widespread within recreational sites.
Guide-Rec-5	Unauthorized travel routes should be returned to natural conditions to discourage continued use.

Guide-Rec-6	Management tools (education, engineering, and enforcement) should be used to prevent resource damage due to recreational activities where needed and feasible. Examples of such tools include, but are not limited to: traffic control devices, designation of campsites, time limits, site rotation, group size limitation, registration, public contact, written information, permits, seasonal closures, fencing, enforcement activity, and current information posted on the internet.
Guide-Rec-7	Redesign, restoration or rehabilitation of recreation sites should be carried out where recreation activities have caused unacceptable natural and social resource impacts.
Guide-Rec-8	New developed campgrounds and designated dispersed campsites should be located away from riparian areas, floodplains, and other environmentally sensitive areas.
Guide-Rec-9	To guide appropriate motorized use, accurate and understandable signs should be placed in effective locations to discourage encroachment of motorized vehicles into non-motorized areas.
Guide-Rec-10	Engineering tools should be used to minimize recreation and livestock grazing conflicts. Tools could include but are not limited to: trail design that avoids stock tanks, incorporation of self-closing gates, use of ATV cattle guards or gates around cattle guards for horseback riders.
Guide-Rec-11	Within campgrounds, tree cutting should be limited to those that are diseased or a safety hazard.
Guide-Rec-12	Generally, in areas outside of the Prescott Basin Management Area, camping by each individual or group should not exceed a period of 14 days in a 30 consecutive-day period within the Prescott NF unless specifically designated otherwise. (See Prescott Basin Management Area in chapter 5 for guidance related to that area.)
Transportation	
Guide-Trans-1	Where creation of alternate routes does not lead to excessive damage to other resources, opportunities to relocate and restore motorized roads or trails in riparian areas and in proximity to other water courses should have priority.
Guide-Trans-2	Roads and trails removed from the transportation network should be rehabilitated as soon as possible. Treatments may include re-shaping travelways, removal of stream crossing structures, restoring and armoring natural drainages, stabilizing ground surface, revegetation, and maintenance or restoration of fish passage.
Guide-Trans-3	Roads and trails should be designed to not impede terrestrial and aquatic wildlife species movement and habitat connectivity.
Guide-Trans-4	Seasonal road and trail closures or other management methods should be used to manage and protect resources and infrastructure.
Guide-Trans-5	To avoid unintended entrapment, wildlife friendly design for cattle guards should be incorporated for new and replacement installations.
Guide-Trans-6	When system roads are constructed or reconstructed, efforts should be focused on reducing cumulative watershed effects This could include but is not limited to using design features that minimize sedimentation, reduce of number or length of system roads, or rehabilitate unneeded system roads and user-created routes.
Wilderness (See also Minerals Guideline 9)	
Std-Wild-1	**Resolve conflict between wilderness values and recreation uses by favoring wilderness values.**

Std-Wild-2	**Natural ecological processes shall be allowed to occur freely in wilderness to the extent that they retain the wilderness character, except where public and firefighter safety and private property is put at risk. Activities allowed in wilderness shall be managed to preserve the wilderness character and value.**
Std-Wild-3	**All fire management actions within wilderness shall be conducted in a manner compatible with overall wilderness desired conditions including the character and values associated with each individual wilderness area.**
Guide-Wild-1	Where agency or applicant objectives can be met outside of designated wilderness, special use permits should not be issued in wilderness.
Guide-Wild-2	Wilderness maximum group size should be limited to 15 people except for occasional Forest Service maintenance activity or organized rescue or fire-fighting force in the performance of official duties.
Guide-Wild-3	Unless otherwise approved under permit, the maximum size of a party traveling or camping at one location with riding or pack animals should be limited to 10 animals.
Guide-Wild-4	Wilderness boundary posting should be maintained in areas where non-conforming use is likely to occur.
Guide-Wild-5	Where active intervention is warranted to preserve the wilderness character, corrective activities should be initiated for areas that become degraded as a result of human activities.
Guide-Wild-6	Facilities at wilderness trailheads should be consistent with level of use.
Guide-Wild-7	Minimum Impact Suppression Tactics[8] (MIST) should be used when managing both wildfire and prescribed fire within wilderness.
Guide-Wild-8	During wildland fire operations, a wilderness resource advisor should be assigned to all fires occurring within wilderness or when there is a high likelihood that fire will spread into a wilderness area.
Guide-Wild-9	The use of helispots, spike camps and water sources outside of wilderness should be considered before adding impact to the wilderness.
Guide-Wild-10	Decisions for the appropriate suppression tool or tactic in the wilderness should receive the same considerations for firefighter and public safety and the protection of values at risk as they would outside of wilderness. If such considerations are not urgent, the use of retardant in the wilderness should be avoided if possible.
Wild/Scenic Rivers	
Std-W&S-1	**Requirements included in The Verde Wild and Scenic River Comprehensive River Management Plan for Coconino, Prescott and Tonto National Forests (2004) shall be incorporated into management activities.**
Std-W&S-2	**Within river segments that are eligible for Wild/Scenic Rivers designation, identified outstandingly remarkable values shall be afforded adequate protection, subject to valid existing rights, until the eligibility determination is superseded (i.e., the segment is determined not suitable for designation, or Congress makes a decision regarding designation). Authorized uses shall not be allowed to adversely affect either eligibility or the tentative classification, (i.e., actions that would change a classification from wild to scenic).**

[8] Minimum Impact Suppression Tactics are the strategy and tactics that meet fire management objectives with the least environmental, cultural and social impacts, including in this case, wilderness values.

Education/Interpretation	
Guide -Interp 1	Use of opportunities to provide interpretation and education related to the natural world and Prescott National Forest resources should ensure that activities inform people about the following subject areas to assist in achieving Desired Conditions. • Forest Health activities, such as fuels management that leads to reduced risk of intense fire; complexity, risks and benefits of wildland fire management; and the nature of visual changes due to such activities. • Wilderness ethics, values, and opportunities • Awareness and appreciation of resource and land stewardship principles • Rationale for limitations on visitor use such as designation of motorized trails and areas or short term restrictions related to wildlife reproduction • Grazing program and the need to respect fences, gates, and vegetation for multiple uses • Trail ethics • Ecological importance of riparian systems • Value of native plant and animal species and awareness of non-native invasive species issues • Cultural Heritage values • Geology • Mineral use

Management of Open Space, Land Ownership, Energy and Communication Sites, Permits, Recreation Residences and Scenic Values

Standards and guidelines related to management of lands, permits, recreation residences, and energy and communication sites provide guidance for trending toward or achieving DC-Wildlife 1, DC Watershed-1, DC-Open Space-1, DC-lands-1and DC-Scenic-1 in chapter 2 of this document.

Open Space, Lands, Energy and Communication sites, Permits, Recreation Residences, and Scenic Values—	
Std-Lands-1	**Height of towers shall be less than 200 feet above natural ground level[9]. An exception to the height limitation may be granted by the Forest Supervisor, if allowing an increase in height would result in placement of fewer towers, or if a greater height is necessary for emergency services or homeland security. The applicant must prove that the requested height is the minimum necessary to provide communication services. Design features to minimize impacts to bats and birds should be incorporated.**
Std-Lands-2	**New recreational residences shall not be established.**
Std-Lands-3	**Recreational residences shall be occupied no less than 15 days per year and shall not be used as full time residences.**
Guide-Lands-1	Easement rights of way should help provide adequate access to the Prescott NF. When responding to requests for new access permits or easements; easements should be granted in reciprocity if appropriate, to ensure administrative and public access to Forest Land.
Guide-Lands-2	When responding to land exchange proposals as presented, consideration should be given

[9] Towers greater than 200 feet in height require lights and guidewires, which could increase impact to bats and migratory birds.

	to effects to visual characteristics; cultural resources; recreational opportunities; threatened, endangered or sensitive species impacts; and community vision statements. In coordination with general factors to consider in 36 CFR 254.3(1) proposals for acquisition should meet one or more of the following criteria: • Lands within designated wilderness • Lands that contain important wildlife habitat, including that needed for species viability, such as habitat needed to maintain migration patterns or important habitat linkages • Wetlands, riparian areas and other water-oriented lands • Lands that contain unique, natural, or cultural values • Lands that provide needed access, protect public lands from fire or trespass, or prevent damage to resources
Guide-Lands-3	Lands offered by the United States in land exchange should generally meet one or more of the following: • Lands needed to meet the needs of communities and the public, such as land for a water treatment plant. • Lands where public land management would be improved by transferring them to others. • Lands that have lost their wildland character.
Guide-Lands-4	The following guidelines should apply to communication sites: • Help fulfill the public and government need for adequate communication sites. • Communication site management plans, including site boundaries, are implemented at each communication site. • Maximize use of existing facilities, where appropriate, prior to authorizing new facilities. • New authorizations for facility managers should include the requirement that the facility manager provide shared solar-generating systems, back-up generators, grounding systems, fuel containers, access ways, and parking areas as needed for all tenants upon request. • Lot plans as previously established should be eliminated. Sites should be allocated only the actual ground space they occupy. • Maintenance of access roads and trails should be carried out jointly through cooperative maintenance payments proportionate to the amount of use or will be maintained by the users. • Vegetation clearing should be limited to defensible space within a) the communication sites; b) fuel breaks around the perimeter of the sites; and c) areas that pose a hazard to facilities and operational efficiency. • All uses should be designed, operated and maintained to not physically or electronically interfere with the senior uses. Senior uses[10] generally take precedence over new uses. High power uses should be physically separated from low power uses by 1 mile or more. The responsibility for correcting interference problems lies with

[10] Senior communication uses predate later communication applications. The most senior uses form the basis for the communications site designation.

	the holder of the communications site authorization for the facility, the user causing the interference, and the affected parties. • New and replacement towers should be self supporting, and should incorporate design features to minimize bat and bird impacts. • All new and replacement microwave radome covers should be dark grey, or as specified by the Forest representative. • Visual resource objectives should be maintained by using design standards that make towers unobtrusive and by utilizing earth tone colors and nonreflective surface material. • New towers and tower additions should not be authorized if they adversely affect the fire tower lookouts line of sight, or present radio frequency radiation hazards to FS employees or general public.[11] • Wildlife movement corridors, such as the Arizona's wildlife linkages, should be considered when energy sources and transmission lines are located.
Guide-Lands-5	Energy sources should be managed according to the guidelines below: • When compatible, new energy proposals should be located within existing corridors including the Westwide energy corridor unless valid concerns about the reliability and integrity of the state's electrical grid indicate otherwise. • Towers for 69 kV lines and above, should be self-weathering with non-reflective lines, and where geomorphology allows, located in non-sensitive[12] areas that blend in with the terrain or background. • Low growing plant communities that do not interfere with overhead lines, should be maintained within power line corridors. • Less than 69kV power lines should be placed underground where physically feasible. • Overhead utilities should have approved Corridor Management Plans in place prior to all vegetation treatments. • Solar and wind power facilities should be co-located within compatible corridors, or located in non-sensitive areas with the least visual impacts, maintaining natural appearing vistas. • When locating new power line corridors, areas in proximity to existing power line corridors or sub-stations should be considered first. • Utility companies and wind power facilities should incorporate design features to minimize bat and avian collisions. • AZGFD Wind and Solar Energy Development Guidelines should be considered for avoiding or minimizing impacts to wildlife.
Guide-Lands-6	Preparation and implementation of Transmission Corridor Management Plans should be in conformance with the pertinent, most recent guidelines for corridor management, such as the Vegetation Management Guidelines agreed to by APS and Coconino, Prescott, and Tonto National Forests (12/5/06) or maintenance standards approved by the Federal Energy Regulatory Commission. Such plans should be submitted prior to all vegetation treatments.

[11] For FCC purposes, this applies to human exposure to Radio Frequency fields when the general public is exposed, or in which persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

[12] Examples of sensitive areas are important wildlife habitat, waterways, visually unique areas, heritage, occupied Region 3 Sensitive Species habitat, and recreation areas.

Guide-Lands-7	Recreation residences should be managed according to the guidelines below: • Recreation residences, decks, outbuildings and other structures should be colored and designed to blend in with the natural landscape. All improvements should be pre-approved by the Forest Service representative. • Recreation residences should be maintained in good condition to prevent vandalism and wildlife access. • Native plants should be used for landscaping. Type of species and placement should be consistent with maintaining a low fire risk. Non-native invasive species should not be introduced; infestations should be removed where they exist.
Scenic Value (See also: Forest Health Guidelines-3,4,5,6,7,8; Wildland Fire Guidelines 8,9, and Minerals Guideline-5)	
Guide-Scenic-1	Scenic Integrity Objectives (see map A in appendix A) should be met or exceeded.
Guide-Scenic-2	All improvements (including permanent structures), vegetation manipulation, and ground-disturbing activities and/or construction should be compatible with the Scenic Integrity Objective (SIO) for the area and should be designed to complement the character of the surrounding natural landscape. Methods to disguise or minimize visual effects of constructed features by use of colors and materials that blend with the existing landscape should be considered. Vegetation that screens views of structures should be protected or enhanced.
Guide-Scenic-3	For projects needed to protect or enhance forest health, the Scenic Integrity Objectives (SIO's) may be modified on a case-by-case basis.

Minerals[13] and Minerals Material[14] Management

Standards and guidelines related to minerals management provide guidance for trending toward or achieving DC-Minerals-1 in chapter 2 of this document.

Leasable Minerals (See also Guideline Wildlife-5)	
Std-Leasable Minerals-1	**For Private Mineral Rights (includes oil, gas, and minerals outstanding or reserved in deeds), surface disturbance shall be limited to the minimum necessary for extraction of minerals; however, land management decisions must not preclude the ability of private mineral owners to make reasonable use of the surface, as defined by deed and public law.**
Locatable Minerals	
Std-Locatable Minerals-1	**Key heritage sites, administrative sites, and recreation sites that have an investment in facilities shall be requested for withdrawal from mineral entry and location.**

[13] Mineral management on the Prescott NF primarly includes locatable minerals which are defined as hard rock minerals and are mined and processed for the recovery of metals. Locatable minerals may also include certain nonmetallic minerals and uncommon varieties of mineral materials, such as valuable and distinctive deposits of limestone or silica. Management of this type of mining falls under the authorities related to the 1872 Mining Law.

[14] Mineral material includes common variety material such as rock or gravel. Their management does not fall under the 1872 Mining Law and royalties for removal are paid to the government.

Std-Locatable Minerals-2	**Use of closed roads or routes that are not on the motorized vehicle use map for mining activity must be authorized. This is usually done through the plan of operations or notice of intent approval process.**
Guide-Locatable Minerals-1	Provisions should be provided for recreational gold panning and dry mining activities that are allowed on the PNF. These could include but would not be limited to: • Guidance found in 36 CFR Part 228 • Minimizing disturbance to riparian vegetation • Avoiding disturbance to upland vegetation • Only operating one area at a time and refilling holes and restoring areas of operation as nearly as possible to their pre-mining appearance
Guide-Locatable Minerals-2	Given that the Forest Service function is the management and protection of surface resources in a manner compatible with reasonable and logical mining operations, the following should be included in Plans of Operations for locatable minerals: • Structures and support facilities for mining activity should be located outside riparian areas. Where no alternative to locating facilities in riparian area exists, site-specific design features should be developed to minimize impacts. • Mine waste that has the potential to generate hazardous material should be located outside of riparian areas. If there is no reasonable alternative, design features should be applied to minimize impacts. • Approval of mining activities should include the use of reclamation bonds to protect and restore surface resources. • Mitigation measures should be used for Southwestern Region Sensitive Species to minimize impacts to populations due to mineral exploration or extraction activity. • Watershed protection and mitigations should be incorporated to avoid degradation of aquatic systems, including water quality, during mineral extraction. • Priority should be given to closing and reclaiming abandoned mine lands.
Minerals Materials	
Std-Minerals Materials-1	**Restoration plans shall be prepared before development and use of new mineral material sources[15]. Existing pits that have not been utilized as a source for mineral materials for 2 years shall require a restoration plan before approval is granted to new applicants.**
Guide-Minerals Materials-1	Adverse effects to aquatic and other riparian dependant resources from mineral material operations should be avoided.
Guide-Minerals Materials-2	Visual impact assessments should accompany new mineral material pit proposals. Effort should be made to meet scenic integrity objectives for the area of activity.
Guide-	Mineral material sites for public use and those only available for Forest Service use

[15] Mineral material' is defined as common variety minerals such as rock or gravel.

Minerals Materials-3	should be determined and made public.
Guide-Minerals Materials-4	Decisions on mineral material development should balance private and community needs with potential resource impacts, while providing material for Forest Service road maintenance or other needs.
Guide-Minerals Materials-5	Mineral material activities should not be permitted in designated or recommended Special Areas (Wilderness, Wild/Scenic Rivers, etc.)
Guide-Minerals Materials-6	Generally, occupied Southwestern Region Sensitive Species habitat should be avoided during development of new mineral material extraction sites. Where feasible, heavy equipment use and material removal should not take place in occupied Southwestern Region Sensitive Species habitat within current or new permitted sandstone or dolomitic limestone quarries.

Management of Heritage Values

Standards and guidelines related to management of heritage values provide guidance for trending toward or achieving DC-Heritage-1 and 2, and Minerals 1 in chapter 2 of this document. There are few guidelines for heritage, because most direction exists as law and Forest Service policy.

Heritage Values (See also Minerals Std 3)	
Guide-Her-1	Heritage sites on the deferred maintenance list should be protected from impacts due to erosion or natural weathering as well as potential human activity.
Guide-Her-2	Development, access, signage, and interpretation should be minimized for sites eligible for and listed on the National Register of Historic Places to better provide protection.

Range Management

Standards and guidelines related to range management provide guidance for trending toward or achieving DC-Watershed-1 and DC-Veg-1, 2, and 5 in chapter 2 of this document.

Range (See also Guidelines Soils-7 and Watershed Integrity- 11,12,13,14)	
Std-Range-1	**Water troughs shall incorporate escape devices to prevent animal entrapments.**
Std-Range-2	**Year-long livestock grazing in riparian areas (streams, springs and seeps) shall be avoided to prevent adverse impacts to water quality and riparian habitat in those areas.**
Guide-Range-1	The placement of salt, minerals, and/or other supplements for the purposes of livestock management should be located further than ¼ mile from riparian areas or seasonally present water that is not overland flow.
Guide-Range-2	For structural improvements, the following should be considered: • Implement design features that incorporate wildlife needs and reduce barriers to movement and entrapment hazards. • Consider wildlife needs in fence placement and design to reduce barriers and hazards to movement and minimize chances of entrapment • Remove fencing when it is no longer needed.

Guide-Range-3	After occurrence of wildland fire or mechanical activity that removes most vegetation, a time period for recovery, establishment and re-growth of grasses and forbs should be determined and applied to meet site specific objectives.
Guide-Range-4	Livestock salting should be located away from known locations of Southwestern Region Sensitive Plant Species, so that plants are not adversely affected by associated trampling
Guide-Range-5	Livestock use on woody riparian species (cottonwood, willow, ash, alder, etc.) should provide for maintenance of those species and allow regeneration of new individuals leading to diverse age classes of woody riparian species where potential for this vegetation exists and where the resource objective is to manage for woody species.

Forest Health[16] Management

Forest health management standards and guidelines provide guidance for trending toward or achieving Desired Conditions labeled as DC-Ecosystem Resilience-1, DC-Watershed-1, DC-Veg-2 and 6, DC-Wildlife-1, and DC-Scenic-1 in chapter 2 of this document.

Forest Health	
Guide-FH-1	Ponderosa pine site treatment timing and residual green slash accumulations should be managed to minimize opportunities for *Ips* beetle populations to increase.
Guide-FH-2	Along visually sensitive roads (Concern Level 1 and 2) within High Scenic Integrity Objective areas (See map A in appendix A) or next to recreation sites, branches and tree tops from management activity (slash) should be piled and burned or removed from the visible area up to 50feet from edge of the road.
Guide-FH-3	When management activities require cutting trees in piñon-juniper vegetation within the viewshed of Concern Level 1 Roads, cut trees should be treated so that pieces lie no higher than 18 inches above the ground.
Guide-FH-4	Log landings should be out of sight of Concern Level 1 Roads and developed recreation areas, except where steep slopes, archeological sites, sensitive soils, sensitive species habitat, lack of road access, or other similar factors prevent it.
Guide-FH-5	Within the viewshed of Concern Level 1 and 2 roads, timber markings should be located so that they are not visible from the road.
Guide-FH-6	When located within the viewshed of Concern Level 1 roads or within developed recreation sites, log landings and skidding areas should be reclaimed and slash treatments completed as quickly as possible after timber harvest has been completed in each payment unit.
Guide-FH-7	Flagging visible from Concern Level 1 roads and trails should be removed within one year after project completion to avoid impacting the viewshed.

[16] Most vegetation treatments in forested environments are done to reduce fuel build-up, adjust structural characteristics of forested ecosystems, or to trend toward wildlife or watershed integrity desired conditions. Therefore this section has been titled Forest Health.